

Amendments to the Specification:

Please replace the paragraph [0008] beginning at page 2 with the following amended paragraph:

[0008] Figure 1 illustrates a device 100 for programming a non-volatile phase-change memory device 102 according to an embodiment. The mechanism for storing data in the phase-change memory device 102 involves a change in state of a material or structure. For example, the storage mechanism may involve a change between an amorphous state of ~~an~~ a material to a crystalline state of the material. The phase change may be temporally asymmetric, that is, the state change in one direction (e.g., amorphous-to-crystalline) may take longer than the state change in the other direction (e.g., crystalline-to-amorphous). This asymmetry in transition between states translates directly to an asymmetry in transition between memory states (e.g., LOW/HIGH, or 0/1 memory transitions for binary memory devices). The device 100 utilizes this asymmetry to decrease preprogramming time of the phase-change memory device and provide dual mode ("fast" and "normal") programming in subsequent programming operations.